

Title (en)
MICROPOROUS POLYVINYLDENE FLUORIDE MEMBRANE

Title (de)
MIKROPORÖSE POLYVINYLDENFLUORID-MEMBRAN

Title (fr)
MEMBRANE DE FLUORURE DE POLYVINYLIDÈNE MICROPOREUSE

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Abstract (en)

[origin: WO2014191296A1] The invention relates to a hydrophobic hollow fiber membrane made of a vinylidene fluoride polymer, with a wall, a wall thickness, an outer surface on the membrane outer face, an inner surface on the membrane inner face facing the membrane lumen, and a support layer adjoining the inner surface with a substantially isotropic pore structure over the wall thickness, said pore structure extending over at least 80% of the wall thickness and having pores with an average diameter of less than 1 µm, wherein the hollow fiber membrane has pores in the membrane outer surface and in the membrane inner surface. The invention is characterized in that the vinylidene fluoride polymer has an average molecular weight MW ranging from 555,000 to 700,000 Dalton and a polydispersity greater than 3.0; the pores in the outer and the inner surface are formed in the shape of islands and the ratio of the longitudinal extension to the transverse extension of the pores is no greater than 10; the porosity ranges from 0 to 90 vol.%; the wall thickness ranges from 50 to 300 µm; the diameter of the lumen ranges from 100 to 500 µm; and the hollow fiber membrane has a maximum separation pore diameter dmax, ascertained according to the bubble point method, ranging from 0.3 to 0.7 µm.

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Citation (examination)

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- "Solution Processing Guide for Polymer Membranes Introduction", TECHNICAL BULLETIN, SOLVAY ADVANCED POLYMERS, 1 January 2008 (2008-01-01), pages 10 pp, XP055184321, Retrieved from the Internet <URL:http://doc.diytrade.com/docdvr/450410/43218107/1427599665.pdf> [retrieved on 20150420]
- See also references of WO 2014191296A1

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